

Report on Workshop on eContent Development for Virtual Open Schooling

26-27 May 2014



Organized by
National Institute of Open Schooling
In Collaboration With
Commonwealth Educational Media Centre For Asia, New Delhi

Background

With the support of the Commonwealth Educational Media Centre for Asia (CEMCA), the National Institute of Open Schooling (NIOS) launched the Virtual Open Schooling (VOS) during its 25th Year Celebrations to serve learners with access to Internet, and those who may want to have complete online learning experiences for their education and skill development. Under virtual open schooling system, the learners get the opportunity to study a formal school-based course online and gain credit for certification purpose. Learners can study using asynchronously or synchronously technologies. The courses are based on existing Open Educational Resources, and are built around a learning management system with content stored on online repositories.

Virtual Open Schooling systems have been found very beneficial to various stakeholders. It not only provides personalized, tailored content: suited to individual learning it also provides flexibility to learners in terms of time and saves on permanent infrastructure costs. Virtual Open Schooling also provides access to high quality education.

Currently, NIOS is offering two vocational courses under the Virtual Open Schooling (VOS) system i.e. ICT Applications and Rural Technology. The VOS platform of NIOS has a Learning Management system (LMS) for the direct interaction between the learners and teachers, online admissions, Discussion Forum, Blogs, Online Classes through Video Conferencing, Online assessment, etc.

The faculty members those who are engaged in development of Self-Learning materials will play a very pivotal role in providing the benefit of VOS to the learners. But they need to be trained in different operational mechanism of Virtual Open schooling. In this regard, a Two days' workshop on eContent Development for Virtual Open Schooling was planned for the Academic staff of NIOS in Collaboration with Commonwealth Educational Media Centre for Asia, New Delhi

Objectives

The objectives of the workshop were to

1. Orient academic staff of NIOS to use Virtual Open School platform
2. Enable NIOS Staff use Moodle learning management system for course delivery
3. Create and /or transform existing content for online delivery
4. Develop action plan for offering secondary and senior secondary courses using Virtual Open School

Methodology

A. Model of Training

The workshop covered the following:

1. Lecture-cum-discussion method
2. Activity based/ Hands on training
3. Group work/Group presentation

B. Participants

Academic Officers/SEOs of Academic and Vocational Department and Computer Unit participated in the training programme. The list of participants in the workshop are given in Annexure-I.

C. Resource Person

Mr. Pankaj Tiwari from iDaa Software (P) Ltd., Hyderabad served as the Resource Person to conduct the workshop.

D. Workshop Schedule

The workshop schedule for the duration of the training was for 2 days is given in Annexure-II.

Proceedings of the Workshop

Day One: 26th May 2014

Session I – Inaugural Session: The inaugural session started with NIOS Song, which depicts the vision, philosophy and perspective of NIOS. Welcoming all the dignitaries and participants of NIOS, Sh. U.N. Khaware, Secretary, NIOS shared that while present day world is driven by the use of technology, NIOS is not way behind. He appreciated the visionary role of Chairman, NIOS Dr. S.S. Jena and expressed that under the Chairman's commendable role and leadership NIOS has taken many steps forward in the field of using technology in open schooling. He also thanked Director, CEMCA and the team for extending their support and collaboration for Virtual Open Schooling.

Then Dr. Manas Ranjan Panigrahi, Programme Officer (Education) in his remarks shared his experiences of working in the field of education and technology. Introducing his role, he told that CEMCA has played a very proactive role in integrating technology in education. He shared that technology provides a great platform to disseminate knowledge. It also

helps in reshaping and updating knowledge. Dr. Panigrahi opined that virtual school has the ability to reduce cost, time and broader priority in small place. Providing background of Virtual Open Schooling, he told that with the visionary leadership of Dr. S.S. Jena, platform for VOS has already been developed.



Dr. S.S. Jena, Chairman, NIOS started his inaugural address shared the development of VOS, from consultation to the feasibility study, and the development of the platform. He appreciated the role of CEMCA in this direction to support the VOS initiative. Discussing about the rationale of providing online courses, he shared that online mode is very important to reach out to large number of learners and thus, if NIOS has the objective to reach mass, online courses can help in this direction. He also discussed about the emergence of Massive Open Online Courses (MOOCs). In this context, he posed a challenge before the participants to contribute development of open courses for the VOS platform.

Addressing about issues of offering online courses, Dr. Jena told that there is need to change the present course structure and the course has to be credit based. Course design needs to be done in such a manner that there is scope for the learner to accumulate credit on different subjects as per their requirements and when the learner accumulates full credit, he/she may be awarded certificate/degree.

Dr. Jena said that as the situation worldwide is changing, the course design and style of teaching and learning has to change accordingly. He told that with this workshop each subject coordinator has to develop e-content with the help of their experts. 20-30 experts may be chosen in each subject, who will help NIOS in development of e-contents. He shared that resources are always available and how it is being used matters the most. Regarding

the use of technology, he stressed that technology is no more an option, rather it has become essential to practice in everyday life, more so for distance education. If technology is being used for lifestyle, why can't be used for education. At the end, he thanked the contribution of faculty members and CEMCA in this direction.



At the end, Sh. S.K. Prasad, SAP thanked the dignitaries, participants and staffs of CEMCA.

Session II: After inaugural session, the technical sessions started with discussion on designing online courses; overview of Virtual Open Schooling and Moodle Learning Management System. Introducing the concept of Virtual Open Schooling, resource person shared that VOS can be defined as an educational practice that provides opportunity to learners to study a formal school-based course online and gain credit for certification purpose. Learners can study using asynchronously or synchronously technologies. The courses are based on existing Open Educational Resources, and are built around a learning management system with content stored on online repositories. Digital media integration would facilitate effectiveness of curriculum. Synchronous and asynchronous technologies would facilitate interaction - with peers, with teachers, and with content. He also discussed that currently, NIOS is offering two vocational courses under the VOS. These courses are: ICT Applications and Rural Technology.



NIOS is using Moodle Learning Management system (LMS) for the direct interaction between the learners and teachers which has enabled the following features:

- Online content related to the subjects
- Online live Chat-rooms
- Discussion Forum
- Blog
- Online Classes through Video Conferencing (using BigBlue Button)
- Online assessment
- Different media used for classes i.e. Presentation, documents, video, animation etc.

After the successful completion of the course learners will appear in final examination (term end) for certification. The resource person discussed that VOS is beneficial in the following manners: they offer

- Personalized, tailored content: suited to individual learning
- Flexibility: Anywhere Anytime access, students can enrich their skills in learning a new subject or take up a course or class normally not available at their schools
- Lower costs: Saves on permanent infrastructure costs
- Access to high quality education: Access to quality teachers and peers, increases collaboration

Session III: Describing the working with VOS, the Resource Person shared that the Home page of VOS is the starting point to access different educational resources of VOS. Users of VOS are categorized into Student, VOS Admin, Moodle Admin, Moodle Guest User and Big-Blue-Button Attendee. He discussed that for all users, this is the common and single entry point into the VOS system. In case users forget their password to login, then they can use the *Forgot Password* link in this block to retrieve their password. Their password will be mailed to the Email ID they

registered with in the VOS system. Participants tried the registration system online during this session.

Session IV: Resource person highlighted how to create courses and how to give access to students. How to add activity/resource was also discussed in the session. Uploading courses, organizing courses and controlling course appearances to participants were also discussed in the session. The participants had hands on practices according to the instruction of the resource persons. The session used the Moodle component of VOS.



Day Two: 27th May 2014

Session I: Continuing the work on Moodle, the Resource Person emphasized upon the activities to be introduced in the lesson. Activities can be added by using the add an activity dropdown box when editing is turned on. Discussion was held on different kinds of activities and participants worked on integrating different tools in working out the lessons.

- *Chats:* communication and collaboration. (Tutorial)
- *Forums:* communication, collaboration, and post rating. (Tutorial)
- *Choices:* group feedback, poll, and vote. (Tutorial)
- *Wikis:* allow students to work collaboratively on authoring web documents. (Tutorial)

- *Assignments*: allow students to submit any digital content for grading and allow teachers to record grades for both online and offline activities. (Tutorial)
- *Quizzes*: allow teachers to design quizzes with multiple questions types, re-used options, and feedback. (Tutorial)



Session II: In the next session, discussion was held on different resource type used in development of courses. Resource Person shared that Moodle supports a range of different resource types that allow teacher to include almost any kind of digital content into the courses. These can be added by using the add a resource dropdown when editing is turned on. Discussion and hands on practice were held on the following resource type in the session:

- *Text pages*: plain text pages to put up information or instructions. (Tutorial)
- *Web pages*: web pages that can include formatted text, tables, pictures, links, etc. (Tutorial)
- *Link to an uploaded file or external website*: link to resource that may already exist in electronic form. (Tutorial)

Session III: The valedictory session begun with the sharing of feedback of the workshop by the participants. The participants shared that the workshop was very useful and provided a platform in developing e-contents. They shared that the present workshop has helped a lot to revisit and relate what they have learnt in the previous workshops. The workshop was very much focused and transformed the

vision of working in e-content development. Detailed feedbacks from the participants were collected in a questionnaire.



Thereafter, Dr. Sanjay Mishra, Director, CEMCA in his address told that it is indeed a great privilege to work with National Institute of Open Schooling in the context of Virtual Open Schooling. Various meeting and workshops were organized in the last two years for development of online platform to address the changing requirement of learners and it has been a great accomplishment that NIOS staff actively participated in this endeavour. He appreciated the immense contribution of Dr. S.S. Jena, Chairman, NIOS in this context. Deliberating upon the present workshop, he told that when the planning and designing of the workshop was done, that the idea was to develop an action plan, which will detail out the steps forward to materialize e-content development in different subjects. So, all the faculty members have to prepare a plan, which further will be approved by Chairman, NIOS. The timeline for different works related to e-content development needs to be followed so that the goal of developing e-content for the courses of NIOS can be accomplished. He also shared that CEMCA is always ready to work consistently with the needs of participants with regard to any kind of academic support. Addressing the future course of action, he discussed that the development of software with regard to evaluation is in progress and as soon as the process complete and as per requirement, the workshop may be organized on evaluation.

Dr. S.S. Jena in his valedictory address referred to the participants' feedback and shared that the Virtual Open Schooling has a great potential to reach out to a large chunk of learners those who are accessing information technology through different sources. He told that such kind of workshops will surely help all the participants to work for these learners. He discussed that there are 12 million learners, who are supposed to be enrolled in open schooling system to achieve universalisation of School Education as per the goal envisaged in *Rashtriya Madhyamika Siksha Abhijan*(RMSA). He told that if we can enroll at least 10% of the total enrolment through VOS, the present workshop can be termed as successful. Regarding the development of content, he shared that all Academic Officers after the training, should start identifying the pool of experts who can work on developing e-content in their subjects. He raised the bar of the training when he conveyed that the present workshop will be successful if the faculty members present will be able to train their experts in their subject concerned. He thanked Dr. Sanjaya Mishra, Director, CEMCA and their team for their support and collaboration in every perspective.

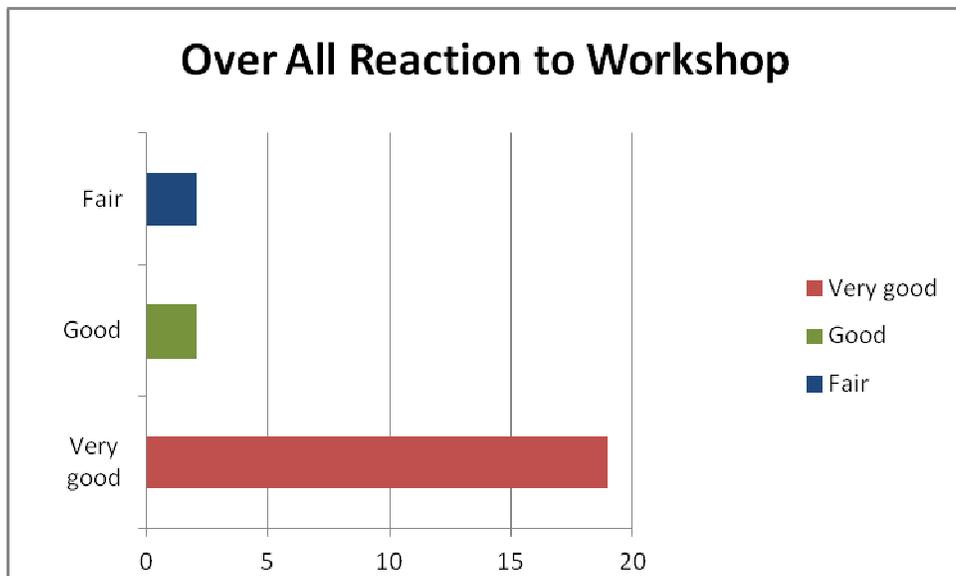


At the end, Dr. Kamal Swaroop Srivastava, Assistant Director (Academic) proposed vote of thanks.

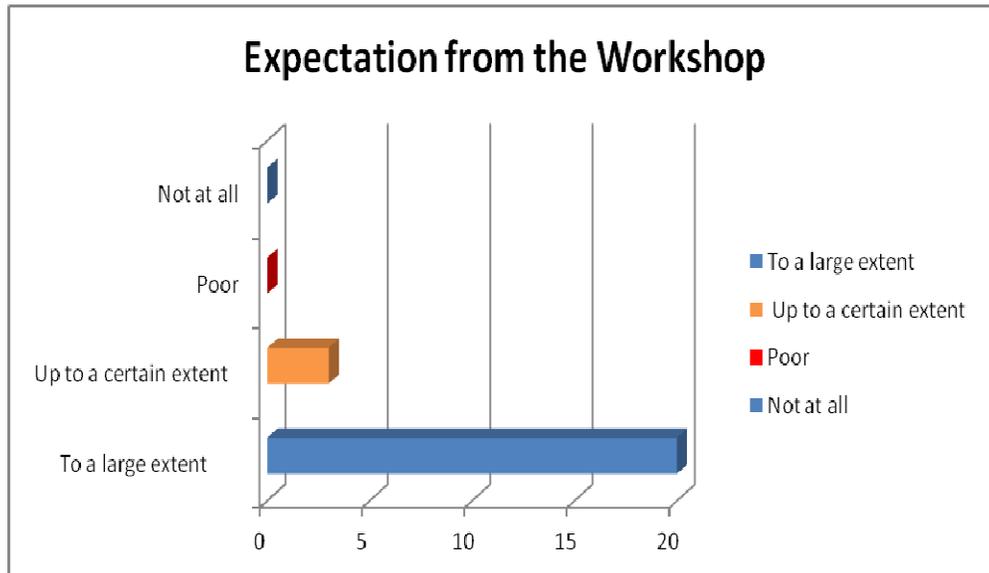


Participants Feedback Analysis

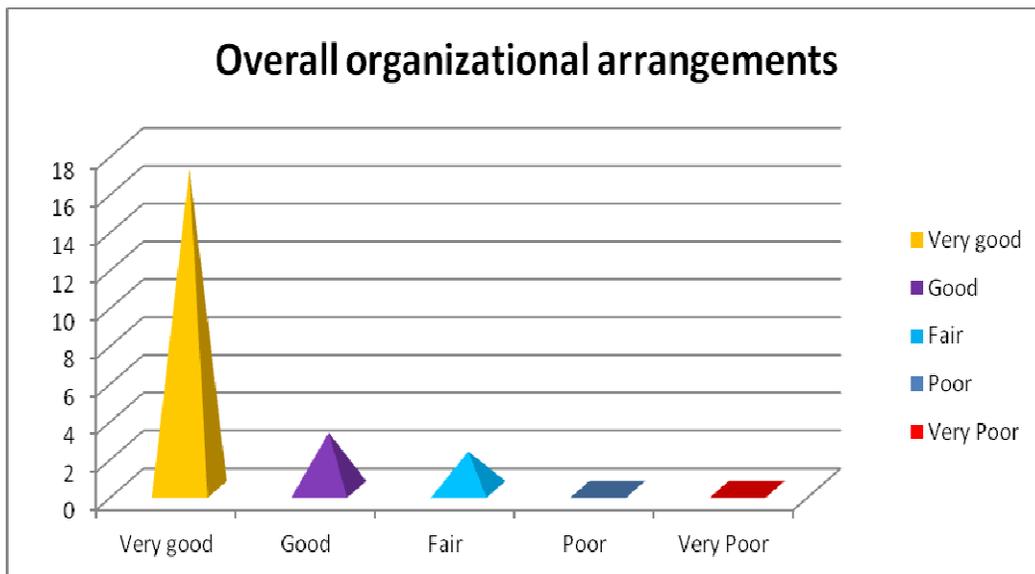
1. Overall reaction to this workshop:



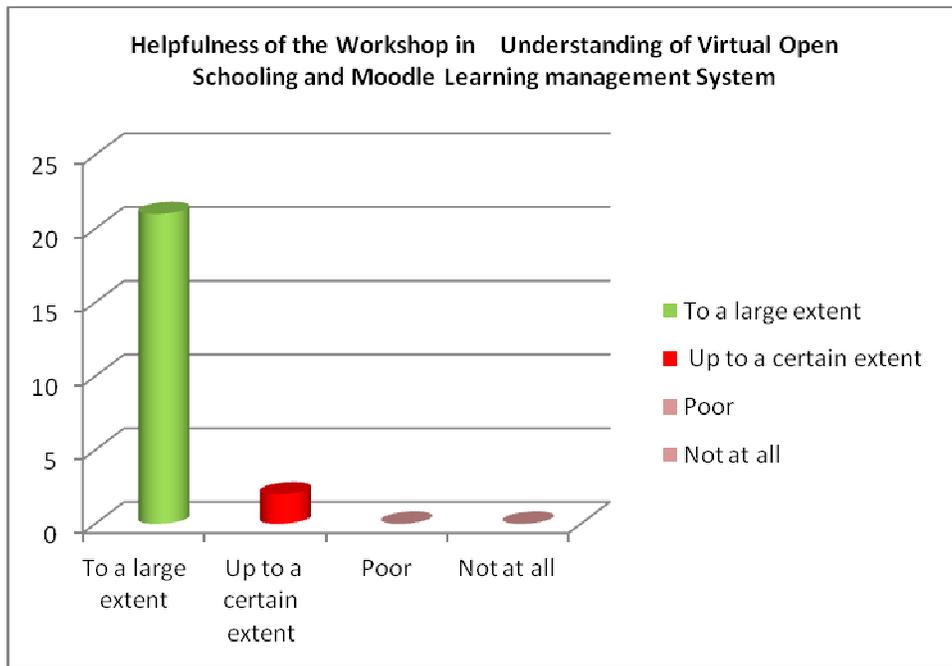
2. The workshop met my expectations



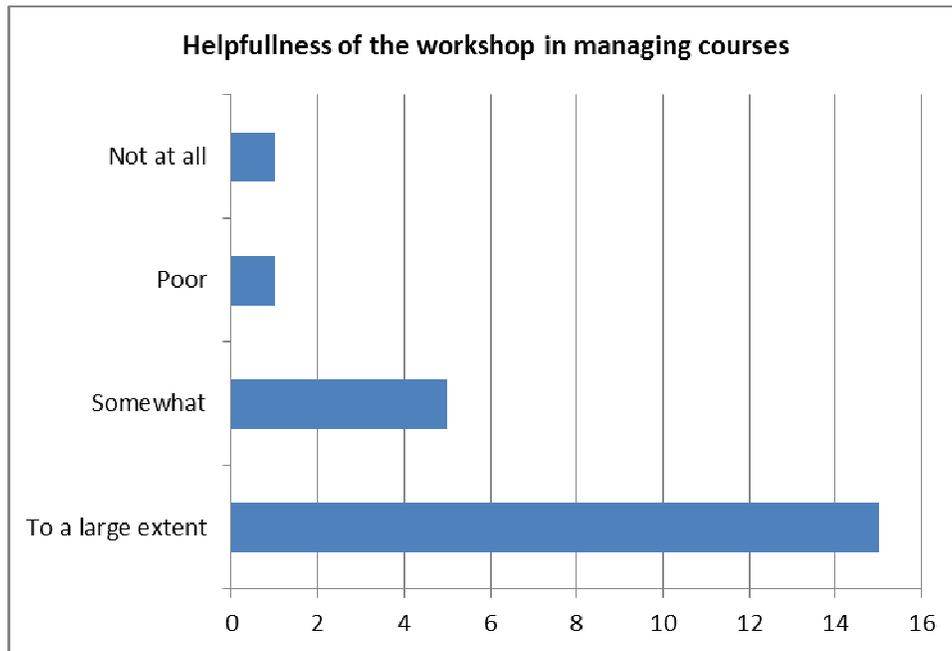
3. Overall organizational arrangements:



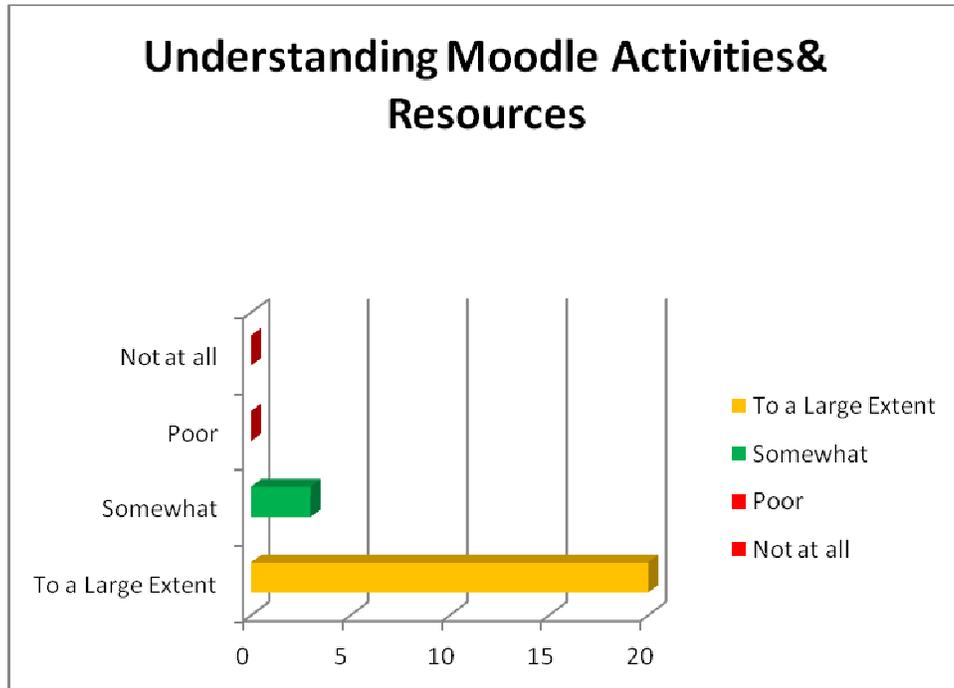
4. Helpfulness of the Workshop in Understanding of Virtual Open Schooling and Moodle Learning management System



5. Helpfulness of the workshop in Managing Courses in Online Mode



6. Understanding Moodle Activities and Resources



7. Opinion of the participants about the workshop

- The workshop provided plenty of opportunities to try out the skill/method immediately.
- The practical aspect helped in clarifying doubts and valuable input in designing online content.
- A very good mixture of theoretical and practical training.
- The workshop will enhance the skill of making the content to link the print with Audio and Video material and thus will benefit a lot to learner of NIOS.
- The hands-on practical training sessions were very good.
- The course was very relevant and timely when NIOS has introduced Virtual Open Schooling and it will help in most ways for fulfillment of Learner's goal.

Annexure-I: List of Participants

List of Participants

Sl. No	Name	Designation
1.	Ms. Rachna Bhatia	Assistant Director (Acad.) Academic
2.	Mr. K.S. Srivastava	Assistant Director (CBC)
3.	Ms. Tarun	Academic Officer (Geography)
4.	Dr. Alok Kumar Gupta	Academic Officer (Physics)
5.	Mr. Shoaib Raza Khan	Academic Officer(Urdu)
6.	Dr. Manish Chugh	Academic Officer (Economic)
7.	Dr. Rajeev Prasad	Academic Officer(Chemistry
8.	Dr. Chunnu Prasad	Academic Officer(Political Science)
9.	Mr. Ram Naryan Meena	Academic Officer (Sanskrit)
10.	Mr. Parthish Kumar Paul	Academic Officer (Technology)
11.	Mr. Sukanta Kumar Mahapatra	Academic Officer (Sociology)
12.	Mr. Sathish V	Academic Officer (Para Medical)
13.	Dr. Neelima Pant	Academic Officer (Agriculture)
14.	Dr. Rajendra Kumar Nayak	Academic Officer (Maths)
15.	Ms. Radhika B	Academic Officer (ICT)
16.	Ms. Madhur Bhatia	Academic Officer (TE)
17.	Dr. Manoj Kumar Thakur	R.E.O
18.	Ms. Neelam Gupta	SEO
19.	Mr. Vivek Singh	SEO
20.	Mr. Pramod Tripathy	SEO
21.	Mr. Sanjaya	SEO
22.	Dr. Soumya Rajan	Academic Officer (English)
23.	Dr. Sanghamitra Suryapani	Academic Officer (Biology)

Annexure-II: Programme Schedule

Session / Timings	Day 1: 26 th May 2014 Understanding the Basics	Day 2: 27 th May 2014 Tools and applications
	10:00 to 10:30 Inauguration:	10:00 to 11:00 Working with MediWiki and eXe for course creation <ol style="list-style-type: none"> 1. Developing content in eXe 2. SCORM Packaging (Single SCO and Multiple SCO) 3. Uploading SCORM Packaged content in Moodle
	10:30 to 11:30 {SM} Designing online courses; Overview of Virtual Open Schooling and Moodle Learning management System	11:15 to 13:00 Moodle Activities& Resources <ol style="list-style-type: none"> 1. Assignments 2. Quiz creation 3. Uploading SCORM packaged courses 4. Book 5. File: Pictures, PDF, Excel sheets, Audio and Video 6. Page 7. URL
Tea Break 11:30 to 11:45	11:45 to 13:00 Role definition in Moodle environment and creating users, enrolment, etc.	
1300 to 1400	Lunch	Lunch
	14:00 to 15:15 Editing text in Moodle <ol style="list-style-type: none"> 1. Text editor 2. Formatting text 	14:00 to 15:15 Developing Action Plan for eContent Development (Participants to work in group to develop a plan); Sharing of the Action Plan, discussion and clarifications
	15:30 to 17:00 Managing courses <ol style="list-style-type: none"> 1. How to create course 2. Adding a new course 3. Uploading courses 4. How to organize courses 5. How to control course appearances to participants 	15:30 to 17:00 Valedictory:

Annexure-III: Feedback Form

**WORKSHOP ON
eContent Development for Virtual Open Schooling
26th and 27th May 2014**

Organized by
National Institute of Open Schooling
and
Commonwealth Educational Media Centre for Asia
Workshop Evaluation

Please provide your feedback on the workshop that you have attended on " **eContent Development for Virtual Open Schooling on 26th and 27th May 2014**

1. Your overall reaction to this workshop:

a. Very Good Good Fair Poor Very Poor

2. The workshop met my expectations:

a. To a large extent Up to a certain extent Poor Not at all

3. The duration of the workshop is:

a. Too long Sufficient Too short

4. Logical sequencing of the workshop was:

a. Very useful somewhat useful Not very useful Not at all useful

5. Overall organizational arrangements:

a. Very Good Good Fair Poor Very Poor

6. Number of trainers involved:

7. Too many Just right Too few

8. Kindly rate in general the effectiveness of the trainers:

	Very Effective	Somewhat Effective	Somewhat Not Effective	Not effective
i) Knowledge of the subject matter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Organization and Presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Style and delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Responsive to participants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v) Creating appropriate learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

environment

9. Sufficiency of the training materials supplied:

Sufficient Somewhat sufficient Not sufficient Not at all sufficient

10. To what extent the workshop was helpful in the following areas:

	To a large extent	Somewhat	Poor	Not at all
i) Understanding of Virtual Open Schooling and Moodle Learning management System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Role definition in Moodle environment and creating users, enrolment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Editing text in Moodle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Managing courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v) Working with MediWiki and eXe for course creation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vi) Understanding Moodle Activities& Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Mix of theory and practical in the workshop:

Too Theoretical Good Balance Too Practical

12. Did you have sufficient time for skill practice?

Yes No

13. Value of the workshop to immediate/future work:

Very valuable Somewhat valuable Somewhat not valuable Not valuable

14. Your comments/ suggestions, if any:

Thank you very much for your feedback.

Annexure-IV: Training Material

1. [Moodle Technical Manual](#) (Click here)
2. [Moodle Tutorial](#) (Click here)